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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,628	12/04/2003	Yasuhiro Yamauchi	023971-0346	5735
22428	7590	07/18/2005	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			HO, HA DINH	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/726,628	<b>Applicant(s)</b> YAMAUCHI ET AL.	
	<b>Examiner</b> Ha D. Ho	<b>Art Unit</b> 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/04/03 &amp; 9/22/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This is the first Office Action on the merits of Application No. 10/726,628 filed on 12/04/03. Claims 1-11 are currently pending.

#### *Election/Restrictions*

2. Applicant's election of Species 1, Figs. 1a and 1B, in the reply filed on 05/31/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
3. Claim 8 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 05/31/05.

#### *Claim Rejections - 35 USC § 101*

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 4, 6, 9 and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

- Claim 4 recites the limitations "a lever diagram" in lines 3, 7, 12, 14 and 17. This limitation does not exhibit any functional interrelationship with the claimed hybrid transmission. Accordingly, this limitation is considered as nonfunctional descriptive

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materials or mere arrangement of data, which fall under non-statutory subject matter. See MPEP 2106, IV, 1(b).

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 4, 6, 9 and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- Claim 4 recites the limitations “a lever diagram” in lines 3, 7, 12, 14 and 17, which do not enable one skill in the art to functionally and structurally incorporate the claimed lever diagram in the presently claimed hybrid transmission, as recited in the claims.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 4, 6, 7, 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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- Claim 4, the limitations “a lever diagram” are unclear as to how this limitation functionally and structurally relates the rotating member as part of the claimed hybrid transmission.
- Claim 4, line 10, the recitation of “a motor/generator” constitutes a double inclusion since “first and second motor/generators” were previously recited in claim 1, line 3.
- Claim 4, line 11, the limitation “the sun gear” is unclear as to if it refer to “a sun gear of the prime-mover-side double-pinion planetary gearset” or “a sun gear of the motor/generator-side double-pinion planetary gearset”.
- Claims 7 and 8, lines 2-3, the limitations “the sun gear of the prime-mover-side double-pinion planetary gearset” lack antecedent basis.
- Claims 7 and, lines 4-5, the limitations “the sun gear of the motor/generator-side double-pinion planetary gearset” lack antecedent basis.
- Claims 7 and 8, lines 6-7, the limitations “the prime-mover-side double-pinion planetary gearset” lack antecedent basis.
- Claims 7 and 8, lines 8-9, the limitations “the motor/generator-side double-pinion planetary gearset” lack antecedent basis.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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11. Claims 1, 5, 7 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Tenberge (DE 19909424). This reference is cited in IDS filed 9/22/04.

Regarding claim 1, Tenberge teaches a hybrid transmission (see Fig. 2), comprising first (23) and second (22) motor/generators; and a differential mechanism constructed by two double-pinion planetary gearsets (16, 17, 19, 20 and 15, 18, 20 21) which are coaxially arranged and commonly employ common pinions (20), the differential mechanism including at least four rotating members (14-18), the rotating members being interlinked so that rotating conditions of all of the rotating members are determined when rotating conditions of two (15, 16) of the rotating members are determined, four of the rotating members (17, 14, 16 and 15) being connected to an input from a prime mover (engine), an output to a driveline (differential gear), first (23) and second (22) mover/generators, respectively.

Regarding claims 5, 7 and 11, wherein the common pinions (20) act as inner pinions of the double-pinion planetary gearset (15, 18, 20, 21) and as outer pinions of the two double-pinion planetary gearset (16, 17, 19, 20), wherein a gear pitch-circle diameter of the sun gear (16) is smaller than a gear pitch-circle diameter of the sun gear (15), wherein a common carrier (14) is connected to the output to the driveline.

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tenberge (DE 19909424) in view of Oshidari et al (US 2003/0073534).

Regarding claims 2 and 3, Tenberge does not show the first and second motor/generators being coaxially arranged, and the shafts of the first and second motor/generators being also coaxially arranged.

Oshidari et al show a hybrid transmission (see Fig. 2A), wherein the first and second motor/generators (MGi and MGo) are coaxially arranged, and the shafts of the first and second motor/generators are also coaxially arranged.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hybrid transmission of Tenberge such that the first and second motor/generators are coaxially arranged, and the shafts of the first and second motor/generators are also coaxially arranged in view of Oshidari et al in order to downsize the drive train (see paragraph 0059).

Regarding claim 4, the modified hybrid transmission would have the sun gear (16) being connected to the second motor/generator (23), the sun gear (15) being connected to the second motor/generator (22), the ring gear (17) being connected to the input from the prime mover, and carrier (14) being connected to the output to the wheel driveline.

#### ***Cited Prior Art***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Klemen et al.'287, Minagawa et al.'526, Minagawa et al.'981 and Hayashi et al.'447

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which each shows a hybrid vehicle including planetary gear units and at least two motor/generators.

### *Communication*

15. Submission of your response by facsimile transmission is encouraged. The fax phone numbers for the organization where this application or proceeding is assigned are **(703) 872-9306**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see M.P.E.P. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check. Responses submitted by facsimile transmission should include a Certificate of Transmission (M.P.E.P. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to  
the Patent and Trademark Office on \_\_\_\_\_

(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_  
\_\_\_\_\_

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and M.P.E.P. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ha D. Ho whose telephone number is **571-272-7091**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on **571-272-7095**.



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16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

***NEW CENTRAL FAX NUMBER***


Effective July 15, 2005

17. On July 15, 2005, the Central FAX Number will change to **571-273-8300**. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

18. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number. To give customers time to adjust to the new Central FAX Number, faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005. After September 15, 2005, the old number will no longer be in service and **571-273-8300** will be the only facsimile number recognized for "centralized delivery".

19. **CENTRALIZED DELIVERY POLICY:** For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

HDH  
(571) 272-7091  
July 14, 2005

  
**HAO**  
**PRIMARY EXAMINER**  
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7/14/05